<u>REMARKS</u>

Claims 1, 2, 5-8, 11-13 and 26-29 are pending in this application. Claims 1, 6, 11, 26, 27, 28 and 29, the existing independent claims, have been amended to define still more clearly what Applicants regard as their invention, in terms which distinguish over the art of record.

Initially, in the Office Action dated June 22, 2004, Claims 1, 2, 5-8, 11-13 and 26-29 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement, and 35 U.S.C. § 112, second paragraph, as being indefinite. While Applicants do not concede the propriety of these rejections, nevertheless, to eliminate these as issues, the claims have been amended to change "a plane mapping mode" to --a planar mapping mode--, consistent with the specification.

Claims 1, 2, 5-8, 11-13, and 26-29 were also rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 6,434,265 (Xiong et al.), in light of U.S. Patents 6,271,855 (Shum et al.) and 6,246,413 (Teo).

Independent Claim 1 is directed to an image synthesis method that includes inputting a plurality of image data, generating placement information determined by a placement order of all images inputted in the input step, and obtaining placement information about a plurality of images in which adjacent images have a common subject region. There is also performed a setting step, of automatically setting one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface in accordance with the obtained placement information, as well as combining the plurality of images by using the mapping mode set in the setting step, changing the mapping mode, and issuing a warning, when an image formed by changing the mapping mode in the changing

- 10 -

step does not comply with a predetermined condition set in accordance with the mapping mode, and generating a synthesized image in accordance with the predetermined condition. Claim 1 recites, in addition, that the warning is issued in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical mapping mode is changed to a plane mapping mode.

To begin with, it is believed that Applicants and the Examiner agree that Claim 1 is allowable over *Xiong*, taken alone. Among other features not found in *Xiong* is the issuing of a warning as recited in Claim 1.

Teo relates to a technique for creating a projection of a panoramic image onto a general surface geometry. An initial panoramic image is projected onto an initial surface. A desired surface upon which the panoramic scene is to be projected is provided by the user. The initial panoramic image is then mapped onto the desired surface. *Teo* "enables the user to control the shape of the geometrical surface onto which a panorama is projected" (col. 8, lines 16-18).

Applicants respectfully do not agree that *Teo* teaches "automatically setting one mapping mode", as recited in Claim 1. Contrary to the Examiner's interpretation, *Teo* has specific language that describes the *user choosing* the mapping mode. For example, *Teo* explicitly states in the Summary of the Invention and in Claim 1 that the method involves "generating, *in response to user input*, a surface upon which the scene is to be projected [emphasis added]" (col. 2, lines 9-14). As another example, see Fig. 1A and the associated description stating "the present invention enables a user to modify the surface geometry by means of a user interface" (col. 7, lines 34-37).

- 11 -

It is believed that Applicants and the Examiner agree that *Teo* does not involve issuing a warning of any type.

Thus, if *Xiong* and *Teo* are combined as proposed in the Office Action (assuming for argument's sake that that combination would be a permissible one), the result would, as far as Applicants can tell, lack both automatically setting one mapping mode, and issuing a warning.

Shum relates to technique for refining a model of a 3D scene. An image of a panoramic scene is displayed, and a previously constructed model of the scene is projected onto the screen image. Any portion of the model that is not aligned with the displayed scene is moved to achieve alignment. Plane normals and line directions for previously modeled planes are then estimated using the newly aligned model, and if desired any as yet unmodeled features are modeled. Plane distances and vertex point locations of each plane in the scene that is to be modeled are estimated. At one point in the processing, if the system cannot solve the estimating equations based on user inputs, a system message is issued that suggests a set of potential user inputs that will allow the model to be calculated.

Applicants cannot agree that *Shum* somehow teaches issuing a warning in a case in which the synthesized image exceeds a predetermined angle of view. Contrary to the Examiner's interpretation, *Shum* involves issuing a message when the equations underlying the model are unsolvable (see Fig. 9C and associated description at col. 16, lines 55-60). This occurs when user specified parameters like known lengths of lines (see col. 15, Table 2) are not consistent, thereby making the set of equations used to generate the model unsolvable.

Moreover, even if that message were deemed somehow to be a warning that a synthesized image exceeds a predetermined angle of view, Applicants respectfully submit that the feature that a warning is issued *in the process of changing the mapping mode* is not found in *Shum*. The *Shum* system creates a 3D model from a set of panoramic data in order to allow it to be accurately reproduced without distortion. No initial mapping mode exists in *Shum* to which a change applies. The issuance of a warning where a constraint encountered in the solution of a 3D modeling problem is left unmet in *Shum* has no relation to issuance of a warning upon a certain condition occurring as a result of a change in mapping mode.

For all these reasons, it is believed clear that even if all three patents are combined as proposed (and even assuming such combination would be permissible), the result would not meet the terms of Claim 1, and that that claim therefore 1 is clearly patentable over the art applied against it.

Independent Claim 26 is directed to an image synthesis method, in which a plurality of image data are input, placement information determined by a placement order of all images inputted in the input step is generated, and placement information about a plurality of images in which adjacent images have a common subject region is obtained. There is automatically set one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface in accordance with the obtained placement information, the plurality of images are combined by using the mapping mode set in the setting step, and there is issued a warning, in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical mapping mode is changed to a plane mapping mode.

Claim 26 is deemed allowable over *Xiong*, *Shum* and *Teo* for the same reasons as are given above with regard to Claim 1.

Independent Claim 29 is directed to an image synthesis method, which is capable of synthesizing an image by using a plurality of mapping modes. In the method of Claim 29, a plurality of image data are input, the plurality of images inputted in the input step are combined by using a cylindrical mapping mode, and a discrimination is made as to whether a synthesized image of the plurality of images exceeds a predetermined angle of view or not when a change of the mapping mode used in the first synthesis step to a plane mapping mode is indicated. Also, a warning is issued if it is discriminated in the discriminating step that the synthesized image exceeds the predetermined angle of view.

Claim 29 is deemed allowable over *Xiong*, *Shum* and *Teo* for the same reasons as given above with regard to Claim 1.

Each of the other independent claims is either an apparatus claim or a storage-medium claim corresponding either to method Claim 1 or to method Claim 26, and is deemed allowable for the same reasons as are discussed above.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.
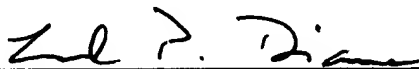
The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of

- 14 -

the invention, however, the individual reconsideration of the patentability of each on its

own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully

request favorable reconsideration and early passage to issue of the present application.

Applicants' attorney of record may be reached in our New York office by

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